Aventura's standalone Hybrid DVRs/NVRs utilize the most advanced H.264 technology in video/audio encoding/decoding, recording and TCP/IP transmission. It has both the features of a Digital Video/Audio Recorder (DVR) for Analog Cameras and a Network Video Recorder (NVR) for IP Cameras. It can work as a standalone or be used to build a powerful **surveillance network.** All Aventura standalone Hybrid DVR's feature TCP/IP networking for remote access, expanded hard disk recording capacity, PTZ control, alarm and sensor input and much more

Physical description
- Max. 16 video in (NTSC/PAL)
- Max 16 IP Cameras
- **Max. 16 audio in (linear in)**
- 1 video out (NTSC/PAL)
- 1 audio out
- 1 line in (for voice talk)
- 1 10/100M ethernet
- Up to 4x 1000GB (4TB) SATA Hard Drive Disks
- Max. 16 sensors inputs
- Max. 4 alarms outputs
- 1 RS-485 for keyboard, 1 RS-485 for PTZ control
- 1 RS-232
- 1 USB
- 1 VGA
- Built-in DVD writer, USB support
- 19" 2U case with rackmount option

Compression function:
- Support maximum 16 analog cameras. Each camera can be compressed independently at 4CIF 30 FPS (NTSC) or 25 FPS (PAL) , using H.264 algorithm.
- Support maximum 16 IP cameras when only using 8 analog channels 16 IP Cameras can be decoded and recorded independently at 4CIF or 8 IP cameras at 720p or 2.0 MP
- Support max 16 channels audio in. Each channel can be compressed independently, using an OggVorbis audio standard. The output bit-rate is 16 kbps.
- Both variable bitrate and selectable frame rate are supported.
- Integrated video and audio streams for a synchronized H.264 stream. Video and audio coincide with each other from the beginning to end during played back.
- Supports following resolution:
  NTSC: 2.0MP 15 FPS, 720P 30 FPS, 4CIF (704x480) 30 FPS, DCIF(528x320) 30 FPS, CIF(352x240) 30 FPS
  PAL: 2.0MP **15 FPS, 720P 30 FPS, 720P,** 4CIF (704x576) 25 FPS, DCIF(528x384) 25 FPS, CIF(352x288) 25 FPS
- Supports multi-zone motion detection.
- Supports position configurable OSD & LOGO.
- Supports watermarking.

Network Functions:
- Supports TCP/IP (ARP, RARP, IP, ODP, TCP, PPP, PPPoE, DHCP, SNMP, etc).
- Supports broad-band transmission (ADSL, etc).
- Supports narrow-band transmission (PSTN, etc).
- Streaming of one or more channels, Net DVR's running state and alarm state can be accessed through the network.
- Net DVR's parameters can be set through the network.
- Supports remote control of PTZ.
- Streams can be recorded in a remote host PC.
- Files in the Net DVR can be downloaded to or remotely played in a remote host PC.
- Supports Net DVR remote upgrading.
- PC hosts can gain direct control of Net DVR's RS-232 or RS-485 port.
- Supports voice talk between host in surveillance center (back-end) and Net DVR (front-end).
- Supports embedded web server. Internet Explorer Browser can be used to access Net DVR.

Storage Functions:
- Supports 6 kinds of record trigger mode: Schedule mode, alarm **mode, motion detection, motion detection & alarm, motion** detection | alarm.
- Won't lose frames when switching to playback
- Can install up to 8 HDD and each HDD supports 2TB (16 TB Max.)

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- **Real-time display & record**
- **Up to 16 channels of audio & video**
- **Up to 16 IP Cameras**
- **Supports up to 8 hard drives**
- **2.0MP, 720p, 4CIF(30 FPS), DCIF(30 FPS), CIF(30 FPS)**
- **Dual stream**
- **Supports: PTZ, remote access**

AVAILABLE MODELS

Part number	Description
DHE-04-04IP-HYB	H.264/SVC Hybrid Embedded DVR with 4 channels analog video/audio and 4 IP cameras support (4CIF). 500 GB HDD, DVD Burner
DHE-08-08IP-HYB	H.264/SVC Hybrid Embedded DVR with 8 channels analog video/audio and 8 IP cameras support (4CIF). 750 GB HDD, DVD Burner
DHE-16-08IP-HYB	H.264/SVC Hybrid Embedded DVR with 16 channels analog video/audio and 8 IP cameras support (CIF). 1 TB HDD, DVD Burner

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- Supports hard disk sleep mode.
- **Supports FAT32 file system.**
- Supports HDD smart
- Supports cyclic and non-cyclic record mode.
- **Supports network access storage (NAS).**
- Supports USB flash disk, USB hard disk, USB CDRW for backup.

Preview & Playback Functions:
- Supports BNC Monitors.
- Supports VGA Monitors.
- Switch quickly in preview mode.
- Supports partial zone sheltering.
- Supports local file playback and time playback, support fast forward, slow motion, pause, play frame by frame, etc.
- Supports OSD, LOG.

PTZ control:
- Supports Pan-Tilt-Zoom control and Preset through front, keyboard and network.
- Supports most popular PTZ protocol.
- Ability to customize new PTZ protocol.

Alarm Functions
- Supports motion detection alarm, switch alarm, signal lost alarm, exception alarm, etc.
- Supports setup of alarm links with PTZ presets.

Others:
- Support RS-485 interface keyboard.
- User-friendly menu interface.
- Multi-level user rights.
- SDK and DEMO software source code can be provided to reduce application development time.

DHE-IP-HYB Series
Rev: 090210

SPECIFICATIONS

Model Name	DHE-04-04IP-HYB	DHE-08-08IP-HYB	DHE-16-08IP-HYB
HARDWARE INTERFACE			
Operating System	RTOS (Real Time Operating System)		
Video System	NTSC/PAL		
Compression	H.264 SVC		
Streaming Compression	H.264 SVC Dual Streaming		
VGA output	**1024×768/60Hz, 1024×768/70Hz, 1280×1024/60Hz**		
Display Resolution	NTSC: 704×480 / PAL:704×576		
Record Resolution	2.0 MP, 720P, 704 x 480/528 x 320/352 x 240 (NTSC) / 704 x 576/528 x 384/352 x 288 (PAL)		
Display Frame Rate	NTSC: 30 FPS / PAL: 25 FPS (per channel)		
Record Frame Rate	Global: 240 FPS Per channel max. (NTSC/PAL): 2.0MP 15 FPS, 720p 30 FPS, 4CIF (704x480) 30 FPS / (704x576) 25 FPS, DCIF (528x320) 30 FPS / (528x384) 25 FPS CIF (352x240) 30 FPS / (352x288) 25 FPS	Global: 480 FPS Per channel max. (NTSC/PAL): 2.0MP 15 FPS, 720p 30 FPS, 4CIF (704x480) 30 FPS / (704x576) 25 FPS, DCIF (528x320) 30 FPS / (528x384) 25 FPS CIF (352x240) 30 FPS / (352x288) 25 FPS	Global: 720 FPS Per channel max. (NTSC/PAL): 2.0MP 15 FPS, 720p 30 FPS, 4CIF (704x480) 30 FPS / (704x576) 25 FPS, DCIF (528x320) 30 FPS / (528x384) 25 FPS CIF (352x240) 30 FPS / (352x288) 25 FPSS
Video Bitrate	32 Kbps-2 Mbps- User Defined/Variable		
Analog Video Inputs	4x BNC (1.0Vp-p 75 Ω) Channels	8x BNC (1.0Vp-p 75 Ω) Channels	16x BNC (1.0Vp-p 75 Ω) Channels
IP Cameras Supported	4 IP at 4CIF or 2 IP at 720p/2.0 MP	8 IP at 4CIF or 4 IP at 720p/2.0 MP	With 16 analog cameras: 8 IP at 4CIF or 4 IP at 720p/2.0 MP With 8 analog cameras: 16 IP at 4CIF or 8 IP at 720p/2.0 MP
Video Loop Output	N/A		
Video Output	1x BNC Channel (1.0Vp-p 75 Ω)		
Monitor Output Support	1x VGA		
Matrix Output	N/A		
Alarm Input	16		
Alarm Output	4		
Audio Input	4x BNC (2.0Vp-p, 1KΩ) Channels	8x BNC (2.0Vp-p, 1KΩ) Channels	16x BNC (2.0Vp-p, 1KΩ) Channels
Audio Output	2x BNC(Linear Electric Level, 600Ω)		
Audio Compression	Ogvorbis		
Audio Bitrate	16 Kbps		
Audio Voice Input	2 Channel, BNC (2.0Vp-p, 1KΩ)		
Hard Drive Interface	500 GB SATA Hard Drive included	1 TB SATA Hard Drive included	1.5 TB SATA Hard Drive included
Max Hard Drive Support	16 TB		
DVD Writer	Included		
USB	3, USB2.0		
Communication Interface	1x RS232, 1x RS485 (For PTZ/Alarm)		
PTZ Control	COM Port Control		
PTZ Protocol Support	Pelco D/Pelco P/Kalatel/		
Network Interface	RJ-45 **10M/100M/1000M** Ethernet		
Network Protocol	DHCP, PPPoE, Static IP, TCP/IP		
Remote Control	Included		
Mouse	Included		
Control Interface	USB Mouse, Front Panel, Remote Control (all Included)		
Video Backup Options	USB Flash Drive, USB Hard Drive, USB DVD-RW, Internal DVD-RW, Web Browser, Client Software		
DVR Interface	Pentaplex (Live Display, Record/Playback, Network simultaneously)		
Motion Detection Record	Yes (Multi area setup per each individual Camera)		
Recording Options	VBR, CBR, adjustable Frame Rate, Manual, Scheduled, Motion Detection, and Alarm		
SOFTWARE			
Web Client Software	Included		
Remote Client Software	Included		
Mobile Phone Software	Included		
Language	English		
ELECTRICAL & ENVIRONMENTAL			
Power Supply	100~240 VAC, 6.3 A, 50~60 HZ		
Surge Protection	Built in		
Power Consumption (without HDD)	50 W		
Working Temperature	14°F~1314° (-10°C~55°)		
Working Humidity	10~90 RH		
PHYSICAL			
Weight	17.6 lb (≤8 Kg) -- without HDD and CD-RW		
Dimension	17.7" x 17.7" x 3.7" (450 mm x 450 mm x 95 mm)		
Regulatory Type	CE, FCC, UL		
Chassis	19" standard 2U chassis		
Warranty (Effective Jan 1, 2009)			
5 Years			

DHE-IP-HYB Series